Even if the Commission were to observe a single, fully implemented interconnection agreement, there should be no presumption that entry barriers have been eliminated or that all checklist items have been met. For starters, the agreement may not be suitable for other CLECs adopting different strategies. Furthermore, a single agreement may demonstrate that competition can occur for certain customers, or in certain geographic areas, but not others. It should also be noted that there is on-going litigation between AT&T and Ameritech in two separate complaints in Federal District Court concerning AT&T's arbitrated agreement with Ameritech in Michigan. The complaints allege, among other things, that Ameritech is unlawfully interpreting its duty to provide unbundled switching and transport such that receipt of those two elements is of minimal utility to competitors. This litigation clearly illustrates the point that a great many important aspects of interconnection remain to be worked out, even after an interconnection agreement had been executed and approved.

If significant aspects of interconnection remain unresolved, CLECs' abilities to compete remain significantly under the control of the BOC. If further cooperation from the BOC is needed to make actual or potential local exchange competition economically meaningful, approval of the BOC's Section 271 application is premature and will diminish consumer welfare.

Nor can the Commission, or the MPSC, simply compel Ameritech Michigan to meet reasonable interconnection terms in the future. Regulation is inevitably highly imperfect, and entrants will be reluctant to rely on future, uncertain regulatory protections when making substantial sunk investments.

There is much to be said for "stress testing" interconnection terms and conditions in practice before concluding that an interconnection agreement can work in practice and that interconnection is "fully implemented."

4. Specific Interconnection Issues in Michigan

Specific aspects of interconnection remain to be fully implemented in Michigan. The record is replete with references to unresolved interconnection issues, the interim nature of various current arrangements, and limitations on the ability of CLECs to compete effectively. To some extent this is inevitable; these are highly complex issues

that are only now beginning to be worked out between Ameritech and CLECs, and in many cases agreements have only been reached through binding arbitration imposed upon the Ameritech. But that is precisely the point. There is great value in giving incentives to Ameritech, the incumbent monopolist, to cooperate to resolve these disputes and clarify remaining ambiguities.

Betty Reeves of Sprint provides an instructive accounting of some of the outstanding problems that Sprint sees with Ameritech's OSS interfaces, as Sprint looks to begin offering service on a resale basis. She indicates that pre-order interface and EDI service ordering interface are not operationally ready. She also testifies that Ameritech's maintenance and repair interface is inadequate and has not been tested to provide service to Sprint's customers at parity with Ameritech's own customers.

Without intending to offer an exhaustive or necessarily representative list of outstanding interconnection issues in Michigan, I list here a number of issues that have arisen recently to illustrate that they are both numerous and critical for CLECs to enter and grow.

- Failure of Ameritech to provide key electronic interfaces with CLECs requiring minimal human intervention, and lack of a means of measuring the performance of these interfaces to determine whether CLECs can perform services such as pre-ordering, ordering, provisioning, maintenance and repair, and billing in substantially the same time and manner that Ameritech can for itself. (AT&T May 7, 1997 Information Filing - Timothy Connolly Testimony; Brooks Fiber April 25, 1997 Response; MCI Filings - April 25 and April 30, 1997.)

- Lack of effective mechanisms at Ameritech for dealing with orders placed for unbundled elements. (AT&T May 7, 1997 Information Filing - Timothy Connolly Testimony; Brooks Fiber April 25, 1997 Response.)

- Failure of Ameritech to offer number portability, dialing parity, and nondiscriminatory access to directory assistance and directory listings as required by the competitive checklist. (AT&T May 7, 1997 Information Filing - Judith Evans Testimony.)

- Shortcomings in access to Ameritech's rights-of-way and other distribution facilities, and uncertainty regarding the prices Ameritech will charge for such access. (AT&T May 7, 1997 Information Filing - William Lester

Testimony; Michigan Cable Telecommunications Association January 30, 1997 Reply.)

- Rates for interconnection, unbundled elements, and transport and termination are not based on properly performed cost studies, and thus are interim, not permanent; the MPSC has found Ameritech's cost studies not in compliance with TELRIC methodology. (AT&T April 18, 1997 Submission - Testimony of Bradford Cornell, James Henson, James Webber, and Janusz Ordover.)

- Lack of evidence that interconnection provided by Ameritech to CLECs is on par with Ameritech's internal standards. (Brooks Fiber April 15, 1997 Response.)

- Failure of Ameritech to comply with the MPSC's orders on intraLATA dialing parity. (MCI March 25, 1997 Response.)

- Questions about the manner in which Ameritech offers unbundled local switching, given that no carriers have actually purchased this element from Ameritech. (AT&T May 7, 1997 Information Filing - Robert Sherry Testimony; MCI April 25, 1997 Response - August Ankum Testimony.)

- Inability of Brooks Fiber's customer to pick Ameritech for intraLATA toll, along with refusal of Ameritech to waive these customers' termination liabilities for intraLATA toll services. (Brooks Fiber March 17, 1997 Motion To Reopen.)

In listing these interconnection issues, I have not assumed that every criticism of Ameritech's interconnection arrangements is meritorious. My point is simply that interconnection in Michigan is currently in a tremendous state of flux, and even according to Ameritech's own filings many aspects of interconnection remain untested.

I have supplemented my reading of the record by discussions with Sprint personnel who are intimately familiar with Sprint's negotiations and arbitration with Ameritech, in Michigan and elsewhere. These discussions confirm that a number of specific checklist items critical to Sprint's entry plans have yet to be proven to work commercially in Michigan. In particular, my understanding from Sprint personnel is that the processing of orders for new service requires cooperation from Ameritech Michigan in a variety of ways, including real-time access to Ameritech Michigan's information, that are yet

unproven. I can certainly understand how Sprint would be unwilling to make investments, including marketing investments to offer resold services, until it is confident that customers who actually place orders for Sprint local service will not experience delays or frustrations in having their orders handled as a result of Sprint's inability to obtain adequate interconnection with Ameritech.

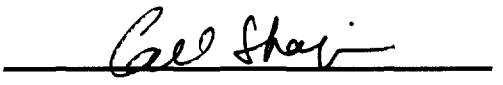
Likewise, it has not yet been proven how local customers of CLECs like Sprint will have their repair and trouble calls handled in a non-discriminatory fashion. I am told that this will require a number of repair and maintenance interfaces to operate smoothly. Again, were Sprint to offer local service, and were Sprint's customers to experience delays in repair relative to Ameritech Michigan, Sprint's brand name would be at risk.

More generally, I am told that Sprint is concerned over how electronic interfaces between itself and Ameritech will operate to provide Sprint with reasonable, timely, and economical access to Ameritech Michigan's operations systems, customer records, and billing data. Billing is a good example of an area of concern; I am told that Sprint has experienced some difficulties and delays in tests of billing for local service in other states outside the Ameritech region.

These examples are not meant to cover all of Sprint's concerns in Michigan, and I do not claim familiarity with the details of Sprint's planned local operations in Michigan or its negotiations with Ameritech Michigan. However, they illustrate a variety of important "details" that must be worked out in practice before Sprint can successfully offer local exchange services.

I declare under penalty of perjury, under the laws of the United States of America, that the foregoing is true and correct to the best of my knowledge, information, and belief.

Executed on the 9th day of June, 1997 in Oakland, California.



Carl Shapiro

APPENDIX

CARL SHAPIRO

Curriculum Vitae

Haas School of Business
University of California
Berkeley, CA 94549
(510) 642-5905
(510) 643-1420 (Fax)
shapiro@haas.berkeley.edu
Home Page: http://haas.berkeley.edu/~shapiro/

Professional Positions

TRANSAMERICA PROFESSOR OF BUSINESS STRATEGY
Walter A. Haas School of Business
University of California at Berkeley, 1994 - present.

PROFESSOR OF BUSINESS AND ECONOMICS
Walter A. Haas School of Business and Department of Economics
University of California at Berkeley, 1990 - present.

DEPUTY ASSISTANT ATTORNEY GENERAL FOR ECONOMICS
Antitrust Division, U.S. Department of Justice
U.S. Department of Justice, 1995 - 1996

CHAIRMAN, ECONOMIC ANALYSIS AND POLICY GROUP
Walter A. Haas School of Business
University of California at Berkeley, 1991 - 1993.

PROFESSOR OF ECONOMICS AND PUBLIC AFFAIRS
Woodrow Wilson School of Public and International Affairs and
Department of Economics, Princeton University, 1987 - 1990.

RESEARCH FELLOW
Center for Advanced Study in the Behavioral Sciences
Stanford University, 1989 - 1990.

VISITING SCHOLAR
Stanford Law School, Stanford University, 1989 - 1990.

ASSISTANT PROFESSOR OF ECONOMICS AND PUBLIC AFFAIRS
Woodrow Wilson School of Public and International Affairs and
Department of Economics, Princeton University, 1980 - 1987.

VISITING FELLOW
Institute for International Economic Studies, University of Stockholm, 1986.

VISITING ASSISTANT PROFESSOR OF ECONOMICS AND PUBLIC POLICY
Graduate School of Business, Stanford University, 1982 - 1983.

ECONOMIST, BUREAU OF ECONOMICS, FEDERAL TRADE COMMISSION
Summer 1980.

Other Professional Activities

Vice-Chair, Economics Committee, Antitrust Section, American Bar Association, 1995 - present.

Editor, *Journal of Economic Perspectives*, 1993 - 1995.

President, Industrial Organization Society, 1995 - 1996.

Member, Defense Science Board Task Force on Antitrust Aspects of Defense Industry Consolidation, U.S. Department of Defense, 1993 - 1994.

Co-Editor, *Journal of Economic Perspectives*, 1986 - 1993.

Associate Editor, *Quarterly Journal of Economics*, 1984 - 1987.

Associate Editor *Rand Journal of Economics*, 1984 - 1986.

Research Associate, National Bureau of Economic Research, 1985 - present.

Director, John M. Olin Program for the Study of Economic Organization and Public Policy, Princeton University, 1988 - 1989

Associate Director, John M. Olin Program for the Study of Economic Organization and Public Policy, Princeton University, 1987 - 1988.

Affiliations

American Economic Association
American Bar Association

Education

Ph.D. Economics, M.I.T., 1981.
M.A. Mathematics, University of California at Berkeley, 1977.
B.S. Economics, M.I.T., 1976.
B.S. Mathematics, M.I.T., 1976.

Honors, Fellowships, and Research Grants

National Science Foundation Research Grant #SES-9209509, "Technology Transitions with Network Externalities," 1992-1994, (with Joseph Farrell).

National Science Foundation Research Grant #SES-8821529, "The Evolution of Network Industries," 1989-1991, (with Joseph Farrell).

Center for Advanced Study in the Behavioral Sciences, Stanford California, Research Fellowship, 1989-1990.

National Science Foundation Research Grant #SES-8606336, "Issues of Industrial Organization in International Trade," 1986-1988, (with Gene M. Grossman).

Alfred P. Sloan Foundation Research Fellowship, 1985-1987.

National Science Foundation Research Grant #SES-8408622, "Technological Competition and International Trade," 1984-1986, (with Gene M. Grossman).

National Science Foundation Research Grant #SES-8207337, "Signals of Product Quality," 1982-1984.

National Science Foundation Graduate Fellowship, 1977-1980.

University of California Fellowship, 1976-1977.

Phi Beta Kappa and Sigma Xi, M.I.T., 1976.

Publications

"Antitrust Policy: Towards a Post-Chicago Synthesis," *Jobs & Capital*, Winter 1997.

"An Economic Analysis of Unilateral Refusals to License Intellectual Property," with Richard J. Gilbert, *Proceedings of the National Academy of Sciences*, November 12, 1996.

"Re-Examining Dominance and Unlawful Exclusion Rules," *Antitrust Conference Report,* The Conference Board, 1996.

"Antitrust in Network Industries," Antitrust Division, U.S. Department of Justice, March 1996 (http://gopher.usdoj.gov/atr/speeches/shapir.mar).

"Mergers with Differentiated Products," *Antitrust*, Spring 1996.

"Aftermarkets and Consumer Welfare: Making Sense of *Kodak*," *Antitrust Law Journal*, Spring 1995.

"Systems Competition and Network Effects," with Michael L. Katz, *Journal of Economic Perspectives*, Spring 1994.

"Systems Competition and Aftermarkets: An Economic Analysis of *Kodak*," with David J. Teece, *Antitrust Bulletin*, Spring 1994.

"The Dynamics of Bandwagons," with Joseph Farrell, in *Problems of Coordination in Economic Activity*, James W. Friedman, ed., Kluwer Press, 1993.

"Standard Setting in High Definition Television," with Joseph Farrell, *Brookings Papers on Economic Activity: Microeconomics*, 1992.

"Product Introduction with Network Externalities," with Michael L. Katz, *Journal of Industrial Economics*, March 1992.

"Horizontal Mergers: Reply," with Joseph Farrell, *American Economic Review*, September 1991.

"Introduction to Liability Symposium," *Journal of Economic Perspectives*, Summer 1991.

"Economic Rationales for the Scope of Privatization," with Robert D. Willig, in *The Political Economy of Public Sector Reform and Privatization*, Ezra N. Suleiman and John Waterbury, eds., Westview Press, San Francisco, CA, 1990.

"On the Antitrust Treatment of Production Joint Ventures," with Robert D. Willig, *Journal of Economic Perspectives*, Summer 1990.

"Asset Ownership and Market Structure in Oligopoly," with Joseph Farrell, *Rand Journal of Economics*, Summer 1990.

"Optimal Patent Length and Breadth," with Richard Gilbert, *Rand Journal of Economics*, Spring 1990.

"Horizontal Mergers: An Equilibrium Analysis," with Joseph Farrell, *American Economic Review*, March 1990.

"Theories of Oligopoly Behavior," in *The Handbook of Industrial Organization*, R. Schmalensee and R.D. Willig (eds.), 1989.

"Market Power and Mergers in Durable Goods Industries: Comment," *Journal of Law and Economics*, 1989

"The Theory of Business Strategy," *Rand Journal of Economics*, Spring 1989.

"Optimal Contracts with Lock-In," with Joseph Farrell, *American Economic Review*, March 1989.

"Dynamic Competition with Switching Costs," with Joseph Farrell, *Rand Journal of Economics*, Spring 1988.

"Counterfeit-Product Trade," with Gene. M. Grossman, *American Economic Review*, March 1988.

"Foreign Counterfeiting of Status Goods," with Gene. M. Grossman, *Quarterly Journal of Economics*, February 1988.

"Dynamic R&D Competition", with Gene M. Grossman, *Economic Journal*, June 1987.

"R&D Rivalry with Licensing or Imitation," with Michael L. Katz, *American Economic Review*, June 1987.

"Optimal Dynamic R&D Programs," with Gene M. Grossman, *Rand Journal of Economics*, Winter 1986.

"Product Compatibility Choice in a Market with Technological Progress," with Michael L. Katz, *Oxford Economic Papers*, Special Issue on the New Industrial Economics, November 1986.

"Investment, Moral Hazard, and Occupational Licensing," *Review of Economic Studies*, October 1986.

"How to License Intangible Property," with Michael L. Katz, *Quarterly Journal of Economics*, August 1986.

"Research Joint Ventures: An Antitrust Analysis," with Gene M. Grossman, *Journal of Law Economics and Organization*, Fall 1986.

"Consumer Shopping Behavior in the Retail Coffee Market," with Michael L. Katz, in *Empirical Approaches to Consumer Protection*, Pauline M. Ippolito and David T. Scheffman, eds., Federal Trade Commission, 1986.

"Technology Adoption in the Presence of Network Externalities," with Michael L. Katz, *Journal of Political Economy*, August 1986.

"Entry Dynamics with Mixed Strategies," with Avinash K. Dixit, in *The Economics of Strategic Planning*, L.G. Thomas, ed., Lexington Press, 1986.

"Exchange of Cost Information in Oligopoly," *Review of Economic Studies*, July 1986.

"InterLATA Capacity Growth and Market Competition," with Robert D. Willig, in *Telecommunications and Equity: Policy Research Issues*, Proceedings of the Thirteenth Annual Telecommunications Policy Research Conference, James Miller, ed., North Holland, 1986.

"Can Unemployment be Involuntary? Reply," with Joseph E. Stiglitz, *American Economic Review*, December 1985.

"On the Licensing of Innovations," with Michael L. Katz, *Rand Journal of Economics*, Winter 1985.

"Normative Issues Raised by International Trade in Technology Services", with Gene M. Grossman, in *Trade and Investment in Service: Canada/U.S. Perspectives*, R.M. Stern (ed.), Ontario Economic Council, 1985.

"Equilibrium Unemployment as a Worker Discipline Device: Reply," with Joseph E. Stiglitz, *American Economic Review*, September 1985.

"Advances in Supervision Technology and Economic Welfare: A General Equilibrium Analysis," with Janusz Ordover, *Journal of Public Economics*, December 1984.

"The General Motors-Toyota Joint Venture: An Economic Assessment," with Janusz A. Ordover, *Wayne Law Journal*, Summer 1985.

"Network Externalities, Competition, and Compatibility," with Michael L. Katz, *American Economic Review*, June 1985.

"Patent Licensing and R&D Rivalry," *American Economic Review Papers and Proceedings*, May 1985.

"Equilibrium Unemployment as a Worker Discipline Device," with Joseph E. Stiglitz, *American Economic Review*, June 1984.

"Informative Advertising with Differentiated Products," with Gene M. Grossman, *Review of Economic Studies*, January 1984.

"Premiums for High Quality Products as Returns to Reputation," *Quarterly Journal of Economics*, November 1983.

"Consumer Protection in the United States," *Zeitscrift für die gesamte Staatswissenschaft, Journal of Institutional and Theoretical Economics*, October 1983.

"A Theory of Factor Mobility," with Gene M. Grossman, *Journal of Political Economy*, October 1982.

"Optimal Pricing of Experience Goods," *Bell Journal of Economics*, Autumn 1983.

"Consumer Information, Product Quality, and Seller Reputation," *Bell Journal of Economics*, Spring 1982.

"Advertising and Welfare: Comment," *Bell Journal of Economics*, Autumn 1980.

Working Papers, Research Memoranda, Work in Progress, etc.

"Antitrust Aspects of the Licensing of Intellectual Property," with Richard J. Gilbert, in preparation for the *Brookings Papers on Economic Activity (Microeconomics)*.

Economic Models of Counterfeiting, with Gene M. Grossman, Report to the U.S. Department of Labor, International Labor Affairs Bureau, January 1988.

"Strategic Behavior and R&D Competition," Prepared for the National Bureau of Economic Research, March 1984.

"Advertising as a Barrier to Entry?," Federal Trade Commission, Bureau of Economics Working Paper #74, July 1982.

"Product Differentiation and Imperfect Competition: Policy Perspectives," Federal Trade Commission, Bureau of Economics Working Paper #70, July 1982.

Book Reviews

Controlling Industrial Pollution: The Economics and Politics of Clean Air, by Robert W. Crandall. Review in the *Journal of Economic Literature*, June 1984, pp. 625-627.

Sunk Costs and Market Structure: Price Competition, Advertising, and the Evolution of Concentration, by John Sutton. Review in the *Journal of Economic Literature*, 1993.

Consulting Activities

Extensive experience working with private parties and government agencies on matters involving antitrust, regulation, intellectual property, measurement of damages, and general business litigation. Additional information and references available upon request.

Personal Information

Place and Date of Birth: Austin, Texas, March 20, 1955.
Citizenship: United States of America.
Marital Status: Married with two children.
Hobbies: Ultimate frisbee, squash, wilderness hiking and canoeing, cycling, basketball, chess, flute.

Affidavit of
Betty L. Reeves

on behalf of

Sprint Communications Company L.P.

Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of	)	
	)	
Application by Ameritech Michigan	)	
Pursuant to Section 271 of the	)	**CC Docket No. 97-137**
Telecommunications Act of 1996 to	)	
Provide In-Region, InterLATA	)	
Services in Michigan	)	
	)	
	)	

AFFIDAVIT OF BETTY L. REEVES
ON BEHALF OF SPRINT COMMUNICATIONS COMPANY L.P.

STATE OF MISSOURI)
)ss.
COUNTY OF JACKSON)

I, Betty L. Reeves, being first duly sworn upon oath, do hereby depose and state as follows:

1. My name is Betty L. Reeves. I am employed by Sprint Communications Company L.P. ("Sprint") as Director-Local Market Development. In this capacity, I have led Sprint's effort to negotiate an interconnection agreement with Ameritech.

Education and Professional Experience

2. I have an Associates in Business degree from Tyler Junior College and majored in Accounting at the University of Texas. I began my telecommunications career in 1973 with United Telephone Company of Texas, a local division subsidiary of Sprint Corporation. After holding a variety of financial management positions, I assumed responsibility for managing United of Texas' revenue accounting functions in June of 1979 and remained in that position until the company's merger with United Midwest Group in 1988. As Revenue Accounting Manager, I had responsibility for toll processing, end user and carrier access billing functions, as well as Interexchange Carrier and intraLATA toll settlements. With the merger, I transitioned into a regulatory/account management position with Midwest Group with primary responsibility for all companies/carriers operating within the Southwestern Bell region. In October of 1988, I joined Sprint Local Division's corporate staff as a Billing Services Manager, with responsibility for software development, billing contract negotiations, and development of standardized billing process and control functions across all local operating divisions. In May, 1992, I transferred to the Corporate Revenues department and assumed responsibility for managing the Local Division's billing and collections relationship with AT&T, including the establishment of a new work group dedicated to the project management of all electronic systems and operational processes impacting AT&T's incumbent local exchange carrier ("ILEC") end user billing and collections requirements. With the passage of the 1996 Telecommunications Act, I was charged with managing AT&T's request for local market entry in Sprint Corporation's

Local Division's operating territory. In May, 1996, I accepted responsibility for supporting the development and execution of Sprint's corporate strategy for local market entry in all states currently served by Ameritech.

Purpose of Affidavit

3. The purpose of this affidavit is to provide a view of local competition in Ameritech territory from the perspective of a competitive local exchange carrier ("CLEC") that is working to achieve operational readiness for local market entry in Michigan and to address claims by Ameritech that its OSS systems and interfaces are fully ready and complete to satisfy its obligations under Section 271 of the Telecommunications Act. Ameritech is not operationally ready from an OSS perspective to provide interconnection, unbundled elements, or resale in a timely, reliable, and nondiscriminatory manner, and in quantities that may be reasonably requested by CLECs.

Status of Operational Implementation of Interconnection Agreement

4. Sprint is currently engaged in negotiations with Ameritech for operational implementation of our interconnection agreement in Michigan. Sprint and Ameritech have entered into a non-disclosure agreement which was designed to protect any information shared or discussed through our Joint Implementation Team. Sprint is, however, free to address issues of policy, contractual commitments, information shared openly with any and all CLECs, or the results of actual testing or operational implementation results.

Ameritech's Interfaces are not Operationally Ready

5. Operational Readiness is the final phase of a systems development effort. An interface between two systems and two or more players is deemed to be operationally ready only when the two systems work together satisfactorily with the underlying systems on both sides of the interface delivering the services for which the interface was designed. Ameritech can not unilaterally declare that its interfaces are operationally ready because Ameritech is only one of the interface users and can not complete an adequate operational readiness test without the support and involvement of the other interface user or partner. In a competitive environment, this testing can not be satisfactorily completed and certified to meet the parity test with a "hand-picked" partner. System testing should demonstrate that the system not only performs according to its design requirements but that the defined business rules support an accurate exchange of data and the ability to process the transactional load at volumes which should be reasonably expected to occur as the competitive marketplace develops. (See Transcript of the Michigan Public Service Commission's Section 271 Case, No. U-11104, Attachment A, pages 92-94 and page 124) This load can not be adequately tested by merely increasing the volumes of data loaded from a single point. (See Attachment A, pages 130 and 131) Rather, a meaningful test of the system must combine the volume requirements with the complexity of multiple users launching transactions from various entry points and sequences. These conditions are difficult to address in a "test" environment but it is essential for Ameritech to demonstrate that its interfaces will function correctly under the conditions presented by a competitive environment in order to support

a claim of parity and operational readiness. Ameritech has not shown that its interfaces will be able to function under these conditions.

6. Sprint's evaluation is consistent with the Wisconsin Public Service Commission's recent decision in Docket No. 6720-T1-120 (See Attachment B, pp. 14-33 and Appendix B) that these very same Ameritech operational support systems are not operationally ready and have not been proven to provide parity with Ameritech's own retail division.

Ameritech's Pre-Order Interface is not Operationally Ready

7. An effective electronic interface which provides timely access to Customer Service information is crucial to any CLEC attempting to enter the local market via the resale of the ILEC's services. The interface currently being offered by Ameritech has not been deployed for use by any major CLEC, and in fact is only in limited use by one of Ameritech's local market competitors today. (See Attachment A, pages 88-90 and pages 130-131) Per Mr. Joseph Rogers' affidavit (paragraphs 25 and 27), USN is using Ameritech's pre-order interfaces for gaining access to Ameritech customer service records ("CSRs"). However, per the testimony of Mr. Steven Parrish, USN Executive Vice President of Operations, in the recent Michigan 271 OSS hearings (Attachment A at 160), USN's business operation does not require that it have access to this information on a real-time basis. By contrast, competitors such as AT&T, Sprint, or MCI would require immediate access to this information as they interact on-line with end users requesting local service. This type of interaction requires an average response time of six (6) seconds or

less. While Ameritech had previously accepted this response time as a requirement, it has been unable to demonstrate its proposed system's responsiveness in an actual operating environment, or that it can support a 6 second response time to multiple large CLECs who will simultaneously be accessing the Ameritech databases. Per Mr. Mickens' testimony before the Michigan PSC during the May OSS hearings, Ameritech is now stating that "10 seconds was the number that we felt we realistically would meet most of the time" and then goes on to state that the typical Ameritech retail representative is going to get this type of activity in three or four seconds. (See Attachment A, page 66) This is not parity and it is erroneous for Ameritech to assume that there would be no negative impact on the CLEC's service to its end users.

8. USN is not even using Ameritech's pre-order interface for any of the other business functions, such as telephone number selection and due date selection, that Ameritech claims can be supported in a real-time, high volume operational environment. Per the affidavit of Mr. Robert Meixner (paragraph 25), both of these functions should be supported while the end user customer is on the phone. If these functions actually work as Ameritech's testimony indicates, I must question why USN is still performing these functions manually, i.e., by telephone contact to an Ameritech CLEC service representative.

9. An automated method for accessing this information in a real-time mode is crucial to Sprint's market entry; however, there are no currently approved industry standards for a pre-order interface. Many of the RBOCs are providing various interim solutions for accessing this information including Graphical User Interfaces ("GUI").

10. The only alternative, other than telephone contact, that Ameritech has offered to Sprint is a highly customized interface which requires a significant CLEC resource commitment to implement an unproven interface. Sprint is currently not aware of any GUI being offered by Ameritech for Pre-Order, despite Mr. Rogers' affidavit (paragraph 92) referencing CCT's plans to implement "the GUI interface". If such a GUI were developed then its processing capabilities and specifications should be made available to all CLECs equally. While Sprint is currently working to deploy Ameritech's proposed electronic interface as a potential "interim" solution to meet this critical market entry requirement, the fact that it has not been adequately tested with any high volume competitor continues to place serious doubts on Ameritech's ability to handle either the volumes generated by multiple competitors simultaneously or to support the highly sensitive response times required for this type of interface when dealing with on-line customer sales.

11. Ameritech must demonstrate that it is capable of providing acceptable response times while handling a high volume demand from multiple CLECs. These are the conditions of a competitive environment, and Ameritech must demonstrate that its proposed pre-order interface is able to function under such conditions. While Ameritech continues to claim that this interface is both operationally ready and capable of ensuring operational parity with its retail operations, Ameritech cannot currently demonstrate the system's ability to handle either the volumes or the response times which will be required by large local service competitors such as AT&T or Sprint. (See Attachment A, page 66) None of the demonstrations or testing conducted to date have been able to verify that this interface will

in fact provide the parity and responsiveness that Sprint's, AT&T's, and MCI's local market entry will demand. Sprint and Ameritech's Joint Implementation Team are currently working together to address these concerns and the parties have agreed to support joint interface testing which will determine Ameritech's ability to meet Sprint's business needs.

12. It is important to note, however, that Sprint will probably not be the largest competitor requiring support from Ameritech, and the stress on this interface from multiple high volume users is the only way to ultimately determine if the interface is in fact capable of supporting local market entry at parity with Ameritech's retail operations. In the event that the interface cannot support the market's demands post-implementation, CLECs such as Sprint will suffer serious impacts to both their operations and customer service capabilities, which could ultimately bring their market entry to a screeching halt. Until this interface has been proven operationally capable of supporting timely responsiveness to high volume demand from multiple users, it can not be accepted as operationally ready and at parity with Ameritech's retail operations environment. Operational parity and non-discriminatory treatment must be verifiable by both this Commission and the CLECs actually offering service within the State of Michigan through specific sustainable ILEC performance measures obtained in an actual operating environment.

13. Many of the CLECs seeking to do business within Ameritech's operating region are working within the established industry forums to support the design and adoption of standards for local service processes which require electronic interfaces with the ILECs.

AT&T, Sprint, MCI, as well as several other industry players are working together to develop their business requirements for a Pre-Order interface. This proposal has been presented to the ECIC (Electronic Communication Implementation Committee) for its evaluation.

Ameritech's EDI Service Ordering Interface is not Operationally Ready

14. The industry has adopted standards for service order processing; however, the latest version and guidelines that the majority of the major CLECs need to deploy are not currently being supported by Ameritech. Ameritech has deployed a hybrid of the TCIF Guidelines (Releases 5, 6 and 7) using EDI X12 Standard Transaction set Version 3030. Sprint, AT&T, and MCI are meeting with Ameritech to address and document the business rules and implementation timelines for the Ameritech development and deployment of the latest service order processing standards, Version 3050 utilizing TCIF Guidelines - Release 7. Release 7 is the first EDI version actually defined for local competition. While Sprint would prefer to develop a single EDI service order interface based on Local Service Ordering Guidelines SR STS-471070, Issue 1, published December 2, 1996 and Customer Service Guidelines, Issue 7 that could then be customized to interface with each of the RBOCs, the fact that Ameritech has already developed its interface based on more customized specifications and is currently deploying this interface with multiple CLECs forces Sprint to take a more interim approach to service order processing in the Ameritech region. The results of both AT&T's and MCI's service order processing indicate some

basic gaps in understanding Ameritech's business rules and editing criteria. Ameritech has agreed to support Sprint's need for documentation in this area so that Sprint may attempt to avoid the same magnitude of processing/editing problems currently being experienced by both AT&T and MCI. (See Attachment A, pages 92-93 and 124-126) This same type of documentation is being requested by all the major carriers as Ameritech approaches modification of its interface to support the Local Service Ordering Guidelines and Issue 7 standards.

Ameritech's Maintenance and Repair Interface is not Adequate

15. Ameritech's proposal for an application-to-application maintenance and repair interface is not currently being used by any of the CLECs operating within the Ameritech region, as admitted by Ameritech witness Joseph Rogers in his affidavit (paragraph 91). Although Ameritech states that this interface is based on current industry standards, it is in fact an industry standard for exchanging repair and maintenance information related to access services that is not operational with all IXCs, including Sprint. Moreover, the maintenance and repair processes involved in local service, both resale and through the purchase and provisioning of unbundled elements, vary significantly from the access arena. It will be essential that all ILECs upgrade this interface to a specification, still under development by the ECIC, designed to support true bi-directional, "agent-to-agent" communication before this interface can truly be considered capable of supporting local service. Even with the enhancements to this interface in place, there is still a question regarding the flow-through

of information to the Ameritech service technician. At this time, it is not known whether all the critical information passed by the CLEC to Ameritech will actually make it all the way through Ameritech's internal systems to the service technician responsible for handling the repair. (See Attachment A, pages 92-94 and 127 for examples of impact of manual intervention/lack of automatic flow through) This is crucial for parity in support between the CLEC end users and Ameritech's retail customers. (See Attachment A, page 119) The critical elements essential to deploying this solution have not yet been finalized. While an "electronically bonded" solution is critical to the development of a sustainable maintenance and repair process, the timeline for finalizing the development and deployment of these enhancements has not been determined. The timeline and cost of implementing this "bonded" solution is significant to any CLEC not already using this interface for access trouble reporting.

16. In Mr. Rogers' Supplemental Direct Testimony in Illinois Commerce Commission Docket 96-0404, he identified that Ameritech is working with CCT to implement an alternative GUI for maintenance and repair support. While Sprint has previously proposed the development and implementation of a GUI for resolution of this critical problem, Ameritech had never presented this alternative to Sprint. Sprint only became aware of Ameritech's GUI interface as a result of Mr. Rogers' testimony in Illinois. Many of the RBOCs, including PacBell and NYNEX, have already deployed GUIs for local service maintenance and repair support. When Ameritech agreed to develop a GUI as an alternative maintenance and repair system with CCT, this interface and its specifications

should have been discussed and made immediately available to all CLECs attempting to enter the Ameritech local market. Communicating the availability of business solutions to any one carrier earlier than the others demonstrates preferential, discriminatory, and anti-competitive treatment. As with all components of the operational implementation plan, there must be established procedures for reporting performance levels, providing status of customer impacting issues, as well as a formal escalation process for issues that are not handled in accordance with performance levels established to ensure parity with Ameritech's service to its own end users. Sprint can not effectively enter the local market within the Ameritech region until an acceptable maintenance and repair reporting solution is tested and deployed.

Additional Concerns About Ameritech's Electronic Interfaces

17. The CLECs seeking to do business within Ameritech's operating region are working within established industry forums to support the design and adoption of standards for local service processes which require electronic interfaces with the ILECs. While several carriers may be actively working with Ameritech to understand its specifications and either influence the adoption by the industry of these as acceptable standards or design software solutions to meet these interfaces as "customized" solutions, these systems cannot be tested for parity in performance and assumed to meet the FCC checklist requirements until they have been adequately tested and deployed. Ameritech's customized development of electronic interfaces has actually resulted in the CLECs having to dedicate additional resources, both